

**Appl. No. 09/889,090**  
**Final Amendment and/or Response**  
**Reply to final Office action of 19 April 2005**

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### REMARKS / DISCUSSION OF ISSUES

Claims 3-5 and 7-20 are pending in the application.

At paragraph 6 of the Office action, the Examiner introduces cites to "Moon" and "Scott" that appear to have no bearing on this case.

At paragraph 7 of the Office action, the Examiner asserts that the "Applicant's arguments with respect to claims 3-5 have been considered and are persuasive. The 35 U.S.C. 112, First Paragraph rejection of claims 3-5 has been withdrawn. However, the 102(e) rejection base on Tanioka has been maintained". The applicants respectfully note that this statement is in error, because there was no rejection of claims 3-5 based on Tanioka, and thus such a rejection could not be "maintained".

In the Office action of 17 July 2004, claims 1, 2, and 6 were rejected under 35 U.S.C. 102(e) over Tanioka (USP 5,929,843), and claims 1-6 were rejected under 35 U.S.C. 112, first paragraph. In response to this Office action, the applicants rewrote claim 3, upon which claims 4 and 5 depend, in independent form, including all of the elements of its base claim, and presented arguments with regard to the rejection under 35 U.S.C. 112, first paragraph.

The applicants thank the Examiner for withdrawing the rejection under 35 U.S.C. 112, first paragraph, but respectfully note that the applicants were not given an opportunity to provide remarks and/or amendments related to a 35 U.S.C. 102(e) rejection based on Tanioka, because claims 3-5 were not rejected under 35 U.S.C. 102(e) over Tanioka in the prior Office action.

Because of these deficiencies, the applicants respectfully request the issuance of a proper non-final rejection, if the remarks below are not persuasive for overcoming the rejections of the final Office action.

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The Office action rejects claims 7-20 under 35 U.S.C. 112, second paragraph. The applicants respectfully traverse this rejection.

The Office action asserts that "the terms 'minimum/maximum color value, color pixel value, input color value' in claims 7-20 ... should be read as 'minimum/maximum luminance value, color luminance value' as implied in page 7-8 of the specification" (Office action, paragraph 2). The applicants respectfully maintain that the claims do not need to be limited to luminance values, per se.

The Examiner's attention is requested to MPEP 2111.01:

During examination, the claims must be interpreted as broadly as their terms reasonably allow. ... One must bear in mind that, especially in nonchemical cases, the words in a claim are generally not limited in their meaning by what is shown or disclosed in the specification. >See, e.g., *Liebel-Flarsheim Co. v. Medrad Inc.*, 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004)(discussing recent cases wherein the court expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment).

Further, the applicants refer to luminance as a "dimension" throughout the specification, and specifically teach that: "various calculation formulas according to the invention described herein can be explained based on the same principles **regardless of the dimension** of each data of red, blue and green" (page 5, lines 19-21).

Because MPEP 2111.01 specifically teaches that the claims need not be limited to the disclosed embodiment(s), as suggested in this Office action, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 7-20 under 35 U.S.C. 112, second paragraph.

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The Office action rejects claims 3-5 under 35 U.S.C. 102(e) over Tanioka (USP 5,929,843). The applicants respectfully traverse this rejection.

The applicants specifically claim a liquid crystal displaying apparatus that includes calculation means for calculating a predetermined digital value  $W$  for driving a luminance-enhancing sub-pixel wherein the digital value  $W$  is obtained in accordance with a function represented by a formula  $W = f(Y_{\max}, Y_{\min})$ , where  $Y_{\max}$  and  $Y_{\min}$  are a maximum value and a minimum value, respectively, of digital input values for red (R), green (G), and blue (B) sub-pixels.

The Office action acknowledges that Tanioka teaches  $W = \text{Min}(R, G, B)$ .

The Office action asserts that Tanioka also teaches  $W = [k_1 * \text{Max}(R, G, B) + k_2 * \text{Min}(R, G, B)]$ , but provides no support in Tanioka for such a teaching. The applicants respectfully maintain that the Examiner created this formula, after reading the applicants' specification and claims, and did not find a basis for such an equation in Tanioka. There is no suggestion in Tanioka that the maximum value of the red, green, and blue sub-pixels should be used to affect the value,  $W$ , of the luminance-enhancing sub-pixel.

The Office action further asserts that, given the equation created by the Examiner, Tanioka's device can be shown to satisfy the equation if  $k_1$  is defined as 0. The applicants respectfully maintain that if  $k_1$  is defined as 0, then the function is not dependent upon  $Y_{\max}$ , and the function cannot be said to be a function of both  $Y_{\max}$  and  $Y_{\min}$ , as the equation  $W = f(Y_{\max}, Y_{\min})$  requires.

The applicants further maintain that the argument proposed in the Office action has no basis in logic, and cannot be used to rationally support the Office action's rejection. Using such a null-argument, Tanioka's device, or any other device, can be said to be dependent on any suggested parameter. For example, one could argue that Tanioka's device is also dependent upon the phase of the moon, or the current time in China, or any other factor that one wishes to prove that Tanioka teaches. That is, merely demonstrating that Tanioka's luminance value  $W$  satisfies the equation  $W = k_1 * (\text{phase of the moon}) + k_2 * (Y_{\min})$ ; where  $k_1 = 0$ ,  $k_2 = 1$ , does not

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rationaly support an assertion that Tanioka teaches determining a luminance value using a function that is based on the phase of the moon. Just as Tanioka cannot be said to teach determining a luminance value in accordance with a function  $f(\text{Phase}_{\text{moon}}, Y_{\text{min}})$ , Tanioka cannot be said to teach determining a luminance value in accordance with a function  $f(Y_{\text{max}}, Y_{\text{min}})$ .

Because Tanioka does not teach a liquid crystal displaying apparatus that includes calculation means for calculating a predetermined digital value W for driving a luminance-enhancing sub-pixel wherein the digital value W is obtained in accordance with a function represented by a formula  $W = f(Y_{\text{max}}, Y_{\text{min}})$ , where  $Y_{\text{max}}$  and  $Y_{\text{min}}$  are a maximum value and a minimum value, respectively, of digital input values for red (R), green (G), and blue (B) sub-pixels, as specifically claimed by the applicants, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 3-5 under 35 U.S.C. 102(e) over Tanioka.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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